

IMAGE INTERPOLATING DEVICE

5

ABSTRACT OF THE DISCLOSURE

An image interpolating device comprises a color filter, in which R, G, and B color filter elements are disposed in a checkerboard arrangement, and an imaging device which generates R, G, and B-signals corresponding to the color filter elements. In an interpolation process, the differences between a G-signal of an objective pixel and G-signals of pixels adjacent to the right, left, upper, and lower sides of the objective pixel are checked. For example, if the G-signal of the left side pixel is the closest to that of the objective pixel, a luminance value Y, color difference signals Cb and Cr, and a modified luminance signal YG of the objective pixel are obtained using the R, G, and B-signals of the left side pixel. Regarding the objective pixel, a B-signal is obtained and the R-signal and the G-signal are modified, using the modified luminance value YG, and the color difference signals Cb and Cr.